

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended): An external storage subsystem comprising:
2 ~~a cache memory to store data temporarily; and~~
3 ~~a plurality of disk drives for storing data;~~
4 ~~a drive interface control unit operatively couple to the disk drives;~~
5 ~~an a channel interface control unit through which a connection with a supervisory~~
6 ~~unit can be established for reading and writing data, wherein;~~
7 ~~a cache memory connected to the drive interface control unit and to the channel~~
8 ~~interface control unit, the cache memory for temporarily storing data between the disk interface~~
9 ~~control unit and the channel interface control unit; and~~
10 ~~a shared memory connected to the drive interface control unit and to the channel~~
11 ~~interface control unit, the shared memory for storing information relating to data that is to be~~
12 ~~staged to the cache memory,~~
13 ~~the information being used by the channel interface control unit to stage data that~~
14 ~~is stored in a plurality of tracks in one or more of the disk drives to the cache memory by way of~~
15 ~~the drive interface control unit,~~
16 ~~the information further being used by the channel interface control unit to destage~~
17 ~~data from the cache memory to be stored to the disk drives by way of the drive interface control~~
18 ~~unit,~~
19 ~~wherein staging of the data into to the cache memory and destaging of the data~~
20 ~~from the cache memory are performed according to an staging and destaging instructions from~~
21 ~~the supervisory unit, the instructions formulated by the supervisory unit according to a selectable~~
22 ~~criteria provided by a user.~~

1 2. (Original) An external storage subsystem having a cache memory to store
2 data temporarily, and in which user data is stored in the cache memory or removed from the
3 cache memory based on user defined information or upon operating information of the external
4 storage subsystem.

1 3. (Currently amended): The external storage subsystem as claimed in claim
2 1, in which the storage staging in or removal destaging from the cache memory of the user data
3 is executed in a processing unit of a data-set domain.

1 4. (Original): The external storage subsystem as claimed in claim 2, in
2 which the storage in or removal from the cache memory of the user data is executed in a
3 processing unit of data-set domain.

1 5. (Currently amended): An information processing system having an
2 external storage subsystem ~~which has a cache memory~~, and a host unit which is external to the
3 external storage subsystem and connected to the external storage subsystem, in which the
4 external storage subsystem comprises a plurality of disk drives, a drive interface control unit, a
5 channel interface control unit, a shared memory, and a cache memory, and in which the host unit
6 executes writing and reading data to the external storage subsystem, and in which
7 the host unit has a host utility program to manage data in the cache memory, and
8 user defined information or operating information of the external storage subsystem for
9 execution of a the host utility program; and,

10 wherein the host utility program can issue a resident command to instruct the
11 channel interface control unit to set residing data in the cache memory, and can issue a reset
12 command to instruct the channel interface control unit to reset residing data in the cache
13 memory,

14 wherein the channel interface unit in the external storage subsystem receives
15 instructions the resident command and the reset command based on the user defined information

16 or the operating information and executes storage of a set of user data in the cache memory or
17 removal of a set of user data from the cache memory,
18 wherein the drive interface control unit is operable to store data on the disk drives,
19 wherein the cache memory is in data communication with the drive interface
20 control unit and the channel interface control unit,
21 wherein the shared memory is in data communication with the drive interface
22 control unit and the channel interface control unit, and stores first information relating to data
23 stored in the cache memory,
24 wherein the channel interface control unit sets and resets residing data in the
25 cache based on the first information.

1 6. (Original): The information processing system as claimed in claim 4, in
2 which the storage of a set of user data in the cache memory or removal of the user data from the
3 cache memory is executed in a unit of data-set domain.

1 7. (Original): The information processing system as claimed in claim 4, in
2 which the user defined information includes a data-set name which is entered from a terminal
3 connected to the host unit.

1 8. (Original): The information processing system as claimed in claim 5, in
2 which the user defined information includes a data-set name which is entered from a terminal
3 connected to the host unit.

1 9. (New): A system comprising a host unit and a disk array system separate
2 from the host unit and in data communication therewith, the disk array system comprising:
3 a plurality of disk drives for storing data;
4 a drive interface control unit operably coupled to the disk drives for transfer of
5 data therewith;
6 a channel interface control unit to receive data transfer commands from a host
7 unit;

8 a cache memory in data communication with channel interface control unit and
9 with the drive interface control unit; and
10 a shared memory in data communication with channel interface control unit and
11 with the drive interface control unit, the shared memory having stored therein first information
12 relating to data staged in the cache,
13 wherein the host unit can issue a resident command and a reset command;
14 wherein in response to receiving a resident command from the host unit, the
15 channel interface control unit accesses the first information to store data received from disk
16 drives into the cache memory,
17 wherein in response to receiving a reset command from the host unit, the channel
18 interface control unit accesses the first information to reset data that is stored in the cache
19 memory.
